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VERIZON
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1515 N. COURTHOUSE ROAD
SUITE 500
ARLINGTON, VA 22201-2909

EXAMINER

MAYO, TARA L

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVEN L. PURCELL

Appeal 2007-0227
Application 10/786,298
Technology Center 3600

Decided: January 25, 2008

Before TERRY J. OWENS, JENNIFER D. BAHR, and
DAVID B. WALKER, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellant appeals from a rejection of claims 1-4, 6-13, 23-26, 28, 29, 31 and 32, which are all of the pending claims.

THE INVENTION

The Appellant claims a method for placing cable in a trench.
Claims 1 and 23 are illustrative:

1. A method, comprising:

cutting a trench in a surface of the roadway;
placing a duct in the trench;
filling the trench with a sealer;
placing a first cable within the duct;
pulling the first cable out of, and through, the duct; and
placing a second cable within the duct without removing
the sealer within the trench.^[1]

23. A method of placing cable within concrete or asphalt,
comprising:

cutting a trench into the concrete or asphalt to a depth of
approximately 3.5 to 4.0 inches from a surface of the concrete
or asphalt;

placing a tubular material having a hollow inner diameter
within the trench;

filling at least a portion of the trench with a sealer;

placing a first cable within the tubular material;

removing the first cable from the tubular material without
removing the sealer from the trench; and

placing a second cable within the tubular material
without removing the sealer from the trench.

THE REFERENCES

¹ The Examiner and the Appellant should address the lack of antecedent basis for “the roadway” in claim 1.

Bantz	US 4,554,724	Nov. 26, 1985
Finzel	US 6,371,691 B1	Apr. 16, 2002
Martinez	US 2003/0068143 A1	Apr. 10, 2003

THE REJECTIONS

The claims stand rejected as follows: claims 1-4, 7, 11 and 12 under 35 U.S.C. § 102(b) as anticipated by Finzel; claims 6 and 13 under 35 U.S.C. § 103 as unpatentable over Finzel; claims 8-10 under 35 U.S.C. § 103 as unpatentable over Finzel in view of Bantz; claims 23, 24, 28, 29, 31 and 32 under 35 U.S.C. § 103 as unpatentable over Finzel in view of Martinez; and claims 25 and 26 under 35 U.S.C. § 103 as unpatentable over Finzel in view Martinez and Bantz.

OPINION

The rejections are reversed as to claims 1-4 and 6-13, and affirmed as to claims 23-26, 28, 29, 31 and 32. We remand the application to the Examiner to consider a new ground of rejection under 35 U.S.C. § 103 of claims 1-4 and 6-13, and we enter a new ground of rejection of claims 1-4, 6-13, 23-26, 28, 29, 31 and 32 under 35 U.S.C. § 112, first paragraph, as the Specification, as originally filed, does not provide adequate written descriptive support for the invention now claimed.

Regarding the Examiner's rejections we need to address only the independent claims, i.e., claims 1 and 23. With respect to claims 25 and 26 the Examiner does not rely upon Bantz for any disclosure that remedies the deficiency in Finzel and Martinez as to independent claim 23 from which those claims depend (Ans. 9).

Rejection of claims 1-4 and 6-13

We need to address only the sole independent claim among claims 1-4 and 6-13, i.e., claim 1. That claim requires:

pulling the first cable out of, and through, the duct; and
placing a second cable within the duct without removing the sealer
within the trench.

The Examiner argues that Finzel “expressly teaches the step of pulling a first cable through the duct and placing a second cable within the duct without removing the sealer within the trench in the passage set forth in col. 26 at lines 4 through 21” (Ans. 11). That portion of Finzel discloses:

FIG. 54 shows the cross-section through an elongate profile body VP comprising a solid profile which has elastic properties, but cannot be deformed plastically. The profile body is fixed in the laying channel by elastic barbs WH. Arranged within the profile body VP are longitudinally running free ducts FK into which fibres can be drawn or blown at a later point in time. Provided in the upper region of the profile body VP is a duct for microcable MK which is introduced into the profile body VP in the direction GR, through a longitudinally running slit VPS, before the laying operation.

FIG. 55 shows the profile body VP of FIG. 54 within the laying channel VN, the elastic barbs WH having been wedged along the channel wall. Additional optical waveguides may possibly be drawn or blown into the free ducts FK of the profile body VP at a subsequent point in time. The upper part of the laying channel VN is, once again, filled with a sealant B.

The Examiner argues that “[t]he step of pulling the first cable out of the duct merely requires the cable to be drawn until its end extends beyond the end of the duct and is inherent to the system shown by Finzel et al. ‘691 (Ans. 11).

Even if that is so, the Examiner has not established that Finzel discloses pulling a first cable out of a duct and placing a second cable “within the duct”, i.e., the same duct. Each of Finzel’s free ducts FK into which fibers can be drawn or blown at a later time is a different duct than the duct into which microcable MK is inserted (figs. 54, 55).

The Examiner, therefore, has not established a prima facie case of anticipation of the invention claimed in claims 1-4, 7, 11 and 12. Regarding claims 6, 8-10 and 13 the Examiner has not explained why it would have been prima facie obvious to one of ordinary skill in the art to pull Finzel’s first cable out of and through the duct and place a second cable in that duct.

Rejection of claims 23-26, 28, 29, 31 and 32

Regarding claims 24-26, 28, 29, 31 and 32, the Appellants rely upon their arguments set forth with respect to claim 23 (Br. 12-14). We therefore limit our discussion to claim 23, which is the sole independent claim among claims 23-26, 28, 29 and 31. Claim 32, which depends from claim 1 and includes the limitation “wherein the first cable is pulled out of, and through, the duct without removing the sealer within the trench” is not separately argued and, therefore, falls for the reason set forth below regarding claim 23 with which it is rejected. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2007).

Independent Claim 23 requires:

removing the first cable from the tubular material without removing the sealer from the trench; and
placing a second cable within the tubular material without removing the sealer from the trench.

Martinez discloses a technique for installing a fiber optic cable in a flexible tube that extends through the inside of a gas service pipe (i.e., a pipe that conveys gas from a gas main to a building's gas meter) such that each end of the fiber optic cable extends through a nipple to the outside of the gas service pipe (¶¶ 0009, 0013; 0058). One end of the fiber optic cable is connected to a network cable and the other end is connected to equipment in the building (¶¶ 0015, 0040). The fiber optic cable can be replaced by extracting it through one of the nipples and feeding a new cable through one of the nipples (¶ 0061). Martinez's technique avoids the need to cut trenches across streets (¶¶ 0007, 0010, 0016, 0045).

The Appellants argue:

FINZEL clearly and expressly discloses that optical waveguides or conductors placed in a mini-cable in a trench are repaired by removing the material filled in the trench so that the mini-cable can be lifted out of the trench (see column 24, line 66 through column 25, line 2; column 25, line 55 through column 26, line 3; column 4, lines 31-34).

Finzel's disclosure of removing sealant from the trench (col. 25, l. 64 – col. 26, l. 3) pertains to repairing a microcable. The sealant apparently is removed to access the particular part of the microcable that needs repair. When Finzel inserts cable into an existing duct, however, the sealant is not removed. Instead, the cable is drawn or blown into the duct (col. 26, ll. 17-19). Thus, Martinez's indication that fiber optic cable can need replacement, and Martinez's disclosure of replacing fiber optic cable by pulling out the old cable and installing a new cable (¶ 0061), would have led one of

ordinary skill in the art, through no more than ordinary creativity, to replace microcable in Finzel's system by pulling the old cable out of a duct and installing a new cable in the duct by the installation methods disclosed by Finzel, i.e., drawing or blowing (col. 26, ll. 17-20).² See *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007) (In making the obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ").

The Appellants argue that "[s]ince the gas service pipes of MARTINEZ are already buried in the ground prior to installing the flexible tube and fiber optic cables, the technique of MARTINEZ has nothing to do with the removal of a cable from a tubular material placed in a trench without removing the sealer from the trench in which the tubular material is placed, as recited in claim 23" (Br. 11). Martinez is relevant in that Martinez points out the need to replace fiber optic cable and discloses replacing fiber optic cable by pulling out the old cable and replacing it with new fiber optic cable (¶ 0061). Hence, Martinez would have led one of ordinary skill in the art to replace Finzel's cable by pulling out the old microcable and installing a new microcable using Finzel's disclosed drawing or blowing installation techniques (col. 26, ll. 17-20).

The Appellants argue that because there is no reason in Martinez's technique to excavate trenches, one of ordinary skill in the art would not

² Moreover, Martinez discloses that by attaching a replacement cable to the old cable, the replacement cable is installed as the old cable is extracted (¶ 0061).

combine Martinez with Finzel to prevent disruption of a roadway (Br. 12). Martinez's teaching regarding replacing cable (§ 0061) would have led one of ordinary skill in the art to replace Finzel's cable by pulling out the old cable and drawing or blowing in a new cable without removing the sealer, whether or not the sealer is a roadway.

The Appellants argue that Martinez "recognizes that existing systems for laying optical cable through service pipes may not work effectively for smaller service pipes, such as gas service pipes (see paragraph [0009]" (Br. 10). That portion of Martinez discloses that proprietary systems are not designed for gas service pipes. That portion would not have indicated to one of ordinary skill in the art that Martinez's disclosure of replacing fiber optic cable in a gas service pipe by pulling out an old fiber optic cable and replacing it with a new fiber optic cable would not be applicable to small gas service pipes or to small ducts in trenches.

We therefore are not convinced of reversible error in the rejection of claims 23-26, 28, 29, 31 and 32.

Remand

We remand the application for the Examiner and the Appellants to address on the record, in view of our above discussion, whether the inventions claimed in the Appellants' claims 1-4, 6-13 would have been obvious to one of ordinary skill in the art in light of the teachings of Finzel in combination with Martinez and any other relevant prior art.

New ground of rejection

Under 37 C.F.R. § 41.50(b) we enter the following new ground of rejection.

Claims 1-4, 6-13, 23-26, 28, 29, 31 and 32 are rejected under 35 U.S.C. § 112, first paragraph, as the Appellant's original disclosure fails to provide adequate written descriptive support for the invention now claimed.

A specification complies with the 35 U.S.C. § 112, first paragraph, written description requirement if it conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, the inventor was in possession of the invention. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983)

The Appellant's original disclosure does not provide adequate written descriptive support for the following limitations in the Appellant's independent claims:

Claim 1: placing a second cable within the duct without removing the sealer within the trench.

Claim 23: placing a second cable within the tubular material without removing the sealer from the trench.

For written descriptive support for those claim limitations the Appellant relies upon the Appellant's Specification paragraphs 0021 and 0045 (Br. 3-4).

Paragraph 0021 discloses:

Subsurface utility cables may then be inserted in the micro duct subsequent to placement of the micro duct in the micro trench. Subsurface utility cables may, thus, be easily repaired after placement into the micro trench by pulling the cables out through the micro duct via, for example, a hand hole or a manhole. The micro duct and spacer may additionally protect the subsurface utility cables from environmental conditions and external events that may otherwise damage the utility cables.

Paragraph 0045 discloses:

The foregoing description of embodiments of the present invention provides illustration and description, but is not intended to be exhaustive or to limit the invention to the precise form disclosed. Modifications and variations are possible in light of the above teachings or may be acquired from practice of the invention. While series of acts have been described with respect to FIGS. 2, 8, 9 and 11, the order of the acts may vary in other implementations consistent with the present invention. Also, non-dependent acts may be performed in parallel.

Neither of those portions of the Appellant's Specification indicates that the Appellant was in possession of a method wherein a second cable is placed within a duct or tubular material, from which a first cable has been removed, without removing the sealer from the trench in which the duct or tubular material has been placed.³ Nor does an indication of possession by the Appellant of that subject matter appear in the other portions of the

³ The disclosure in Specification paragraph 0045 that modifications and variations are possible is not sufficient to indicate possession of placing a second cable in the trench without removing the sealer from the trench.

Appellant's original disclosure.

Moreover, claim 32, which depends from claim 1, recites: "wherein the first cable is pulled out of, and through, the duct without removing the sealer within the trench." That limitation indicates that the claim 1 limitation "pulling the first cable out of, and through, the duct" encompasses such pulling with removal of the sealer within the trench. The Appellant's original disclosure does not show possession of a method wherein the sealer is removed when the first cable is pulled out of and through the duct, but the second cable is placed within the duct without that sealer being removed.

Accordingly, claims 1-4, 6-13, 23-26, 28, 29, 31 and 32 are rejected under 35 U.S.C. § 112, first paragraph, written description requirement.

DECISION

The rejections of claims 1-4, 7, 11 and 12 under 35 U.S.C. § 102(b) over Finzel, claims 6 and 13 under 35 U.S.C. § 103 over Finzel, claims 8-10 under 35 U.S.C. § 103 over Finzel in view of Bantz, claims 23, 24, 28, 29, 31 and 32 under 35 U.S.C. § 103 over Finzel in view of Martinez, and claims 25 and 26 under 35 U.S.C. § 103 over Finzel in view Martinez and Bantz are reversed. Under 37 C.F.R. § 41.50(b) a new ground of rejection of claims 1-4, 6-13, 23-26, 28, 29, 31 and 32 has been entered.

Regarding any affirmed rejection, 37 C.F.R. § 41.52(a)(1) provides "[a]ppellant may file a single request for rehearing within two months from the date of the original decision of the Board."

In addition to affirming the Examiner's rejection of one or more claims, this opinion contains a new ground of rejection pursuant to 37 C.F.R.

§ 41.50(b) and a remand pursuant to 37 C.F.R. § 41.50(e).

37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” 37

C.F.R. § 41.50(e) provides that

[w]henver a decision of the Board includes a remand, that decision shall not be considered final for judicial review. When appropriate, upon conclusion of proceedings on remand before the examiner, the Board may enter an order otherwise making its decision final for judicial review.

37 C.F.R. § 41.50(b) also provides that Appellant must, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, exercise one of the following options with respect to the new ground of rejection, in order to avoid termination of the appeal as to the rejected claims:

- (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . ; or
- (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

The effective date of the affirmance is deferred until conclusion of the proceedings before the Examiner unless, as a mere incident to the limited proceedings, the affirmed rejection is overcome. If the proceedings before the Examiner do not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejections, including any

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timely request for rehearing thereof.

No time period for taking any subsequent action in connection
with this appeal may be extended under 37 C.F.R. § 1.136(a)._

AFFIRMED-IN-PART, REMANDED, 37 C.F.R. § 41.50(b)

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VERIZON
PATENT MANAGEMENT GROUP
1515 N. COURTHOUSE ROAD
SUITE 500
ARLINGTON, VA 22201-2909